In the claims:

Please amend the claims as shown below:

1. (Currently amended) A method used in a computer, comprising:

providing a logical theory ~~(12, 30)~~ having clauses;

~~generating~~ providing a rule ~~(14)~~ that ~~is a resolvent of~~ that has been derived from the clauses in the logical theory, and for which the derivation of the rule is provided in the form of a partial proof tree having nodes;

~~retrieving~~ providing a set of~~n~~ examples ~~(16)~~;

~~generating~~ providing derivations of the examples from the clauses in ~~a proof tree (18, 40) from the example (16) using~~ the logical theory ~~(12, 30)~~ in a form of proof trees;

transforming ~~the~~each proof tree ~~(18, 40)~~ into a database ~~(20, 42)~~ of a coverage check apparatus ~~(28)~~ using a first process sequence;

~~converting the rule (14) into a partial proof tree (60) having nodes (62, 54, 66);~~

transforming the partial proof tree into a database query ~~(22)~~ of the coverage check apparatus ~~(28)~~ using a second process sequence; and

executing the query ~~(22, 72)~~ to identify tuples in the database ~~(20, 42)~~ that correspond to the nodes of ~~the~~ a partial proof tree.

2. (Currently amended) The method according to claim 1 wherein the method further comprises determining whether the partial proof tree ~~(60)~~ is identical to a portion of the proof tree ~~(18, 40)~~.

3. (Currently amended) The method according to claim 1 wherein the method further comprises investigating for each rule ~~(14)~~

and each example ~~(16)~~ whether the rule ~~(14)~~ covers the example ~~(16)~~.

4. (Currently amended) The method according to claim 3 wherein the method further comprises investigating whether a condition part of the rule ~~(14)~~ is satisfied by the example ~~(16)~~.

5. (Currently amended) The method according to claim 1 wherein the method further comprises making the partial proof tree ~~(60)~~ more limiting than the logical theory ~~(12, 30)~~.

6. (Original) The method according to claim 1 wherein the method further comprises concluding that the rule does not cover the example when no match is found in database tables.

7. (Original) The method according to claim 6 wherein the method further comprises concluding that the rule does cover the example when a match is found in database tables.

8. (Original) The method according to claim 1 wherein the method further comprises determining whether the tuples found in the database are associated with the same example.

9. (Currently amended) The method according to claim 1 wherein the method further comprises using the logical theory ~~(12, 30)~~ to describe all possible rules that may be created.

10. (Currently amended) The method according to claim 1 wherein the method further comprises the query checker ~~(24)~~ checking whether or not the query ~~(22)~~ gives an empty result.